

Appl. No. 09/233,443

RESPONSE

Docket No. BVL-105

Listing of Claims:

1-20. (Canceled)

21. (Previously presented) An encapsulated product comprising a substantially homogeneous mixture of:

at least one plasticized matrix material comprising a durum ingredient, wherein the amount of said at least one plasticized matrix material is at least about 30 % by weight, based upon the weight of the encapsulated product;

about 1% by weight to about 85 % by weight of an encapsulant, based upon the weight of the matrix material, wherein the encapsulant is at least substantially uniformly distributed in said at least one plasticized matrix material, said encapsulant being at least one component selected from the group consisting of a pharmaceutical component, nutraceutical component, nutritional component, fragrance component, and biologically active component; and

a hydrophobic agent for controlling the rate of release of the encapsulant, wherein said encapsulated product is in substantially non-expanded, particulate form.

22. (Previously presented) An encapsulated product as claimed in claim 21 wherein said encapsulant comprises at least one member selected from the group consisting of enzymes and live microorganisms.

23-25. (Canceled)

Appl. No. 09/233,443

RESPONSE

Docket No. BVL-105

26. (Previously presented) An encapsulated product according to claim 21, wherein said encapsulant is at least one member selected from the group consisting of antioxidants, phytochemicals, hormones, microorganisms, prebiotics, probiotics, enzymes, formulations containing zidovudine, macromolecular polypeptides, aromatic nitro and nitroso compounds and their metabolites useful as anti-viral and anti tumor agents, HIV protease inhibitors, antibiotics, viruses, steroids, oligopeptides, dipeptides, amino acids, fragrance components, adenosine derivatives, sulfated tannins, monoclonal antibodies, and metal complexes of water-soluble texathyrin.

27-28. (Canceled)

29. (Previously presented) A food topping comprising an encapsulated product according to Claim 21 in granular form.

30-46. (Canceled)

47. (Previously presented) An encapsulated product as claimed in claim 21 wherein the encapsulated product is obtained from a formable mixture which is extruded through a die having multiple apertures, at a rate of extrudate per die area of less than about 5 kg/h per mm².

48. (Previously presented) An encapsulated product as claimed in claim 47, wherein the rate of extrudate per die area is less than 3 kg/h per mm².

Appl. No. 09/233,443
RESPONSE
Docket No. BVL-105

49. (Previously presented) An encapsulated product as claimed in claim 48, wherein the rate of extrudate per die area is less than about 0.5 kg/h per mm².

50. (Previously presented) An encapsulated product as claimed in claim 47, wherein the diameter of the apertures is from about 0.3 mm to about 5 mm.

51. (Previously presented) An encapsulated product as claimed in claim 47, wherein the diameter of the apertures is from about 0.5 mm to about 1 mm.

52. (Previously presented) An encapsulated product as claimed in claim 47, wherein the diameter of the apertures is from about 0.3 mm to about 5 mm.

53. (Withdrawn) An encapsulated product as claimed in claim 104, wherein said liquid encapsulant component comprises at least one enzyme.

54. (Canceled)

55. (Withdrawn) An encapsulated product as claimed in claim 104, wherein said at least one plasticizable matrix material is admixed with said liquid encapsulant component in solid form.

56-65. (Canceled)

66. (Previously presented) An encapsulated product according to Claim 47 wherein said formable mixture is extruded by a single screw or twin screw extruder.

Appl. No. 09/233,443
RESPONSE
Docket No. BVL-105

67. (Previously presented) An encapsulated product according to Claim 47 wherein said formable mixture is obtained by admixing ingredients in an extruder and the formable mixture is extruded from the extruder to obtain pieces.

68-95. (Canceled)

96. (Previously presented) An encapsulated product according to Claim 21, wherein the hydrophobic agent is selected from the group consisting of fats, oils, waxes, fatty acids, and synthetic polymers.

97. (Previously presented) An encapsulated product according to Claim 21, wherein the hydrophobic agent comprises an oil.

98. (Withdrawn) An encapsulated product according to Claim 21, wherein the encapsulant comprises a probiotic.

99. (Previously presented) An encapsulated product according to Claim 21, wherein the encapsulant comprises live *lactobacilli*.

100. (Withdrawn) An encapsulated product according to Claim 21, wherein the encapsulant comprises an enzyme.

101. (Previously presented) An encapsulated product according to Claim 21, wherein a liquid encapsulant component comprising the encapsulant and a liquid plasticizer provides at least a substantial portion of liquid plasticizer for plasticizing at

Appl. No. 09/233,443
RESPONSE
Docket No. BVL-105

least one plasticizable matrix material and the amount of hydrophobic agent is about 5% to about 70% by weight, based upon the weight of the at least one plasticizable matrix material.

102. (Previously presented) An encapsulated product according to Claim 101, comprising about 10% to about 35% by weight of the hydrophobic agent, based upon the weight of the at least one plasticizable matrix material.

103. (Previously presented) An encapsulated product according to Claim 21, wherein the durum ingredient is selected from the group consisting of at least one of durum semolina, durum granular, durum flour, and mixtures thereof.

104. (Withdrawn) An encapsulated product, comprising a substantially homogeneous mixture of:

at least one plasticized matrix material comprising a biopolymer, wherein the amount of said at least one plasticized matrix material is at least about 30 % by weight, based upon the weight of the encapsulated product; and

an encapsulant selected from the group consisting of live *lactobacilli*, a probiotic, a prebiotic, and an enzyme;

wherein a liquid encapsulant component comprising the encapsulant and a liquid plasticizer provides at least a substantial portion of liquid plasticizer for forming the at least one plasticized matrix material, and

wherein said encapsulated product is in a substantially non-expanded particulate form.

Appl. No. 09/233,443

RESPONSE

Docket No. BVL-105

105. (Withdrawn) An encapsulated product according to Claim 104, wherein the biopolymer comprises a carbohydrate.

106. (Withdrawn) An encapsulated product according to Claim 104, further comprising a hydrophobic agent for controlling the rate of release of the encapsulant.

107. (Withdrawn) An encapsulated product, comprising:

at least one plasticized matrix material comprising a biopolymer, wherein the amount of said at least one plasticized matrix material is at least about 30 % by weight, based upon the weight of the encapsulated product; and

an encapsulant selected from the group consisting of live *lactobacilli*, a probiotic, a prebiotic, and an enzyme, wherein the encapsulant is at least substantially uniformly distributed in the at least one plasticized matrix material;

wherein a liquid encapsulant component comprising the encapsulant and a liquid plasticizer provides at least a substantial portion of liquid plasticizer for forming the at least one plasticized matrix material, and

wherein said encapsulated product is in a substantially non-expanded particulate form.

108. (Previously presented) An encapsulated product as claimed in claim 21 comprising about 3% by weight to about 50% by weight of the encapsulant, based upon the weight of the matrix material.

Appl. No. 09/233,443
RESPONSE
Docket No. BVL-105

109. (Previously presented) An encapsulated product as claimed in claim 21 comprising about 5% by weight to about 30% by weight of the encapsulant, based upon the weight of the matrix material.

110. (Previously presented) An encapsulated product as claimed in claim 21, wherein the amount of said at least one plasticized matrix material is from about 60% by weight to about 95% by weight, based upon the weight of the encapsulated product.

111. (Previously presented) An encapsulated product as claimed in claim 26, wherein the amount of said at least one plasticized matrix material is from about 60% by weight to about 95% by weight, based upon the weight of the encapsulated product.

112. (Canceled)

113. (Withdrawn) An encapsulated product as claimed in claim 104, wherein the amount of said at least one plasticized matrix material is from about 60% by weight to about 95% by weight, based upon the weight of the encapsulated product.

114. (Canceled)

115. (Withdrawn) An encapsulated product as claimed in claim 107, wherein the amount of said at least one plasticized matrix material is from about 60% by weight to about 95% by weight, based upon the weight of the encapsulated product.